

generator **1220** may display various pieces of additional information in an ultrasound image by using text and graphics. In addition, the generated ultrasound image may be stored in the memory **1500**.

[0156] A display **1400** displays the generated ultrasound image. The display **1400** may display not only an ultrasound image, but also various pieces of information processed by the ultrasound diagnosis apparatus **1000'** on a screen image via a graphical user interface (GUI). In addition, the ultrasound diagnosis apparatus **1000'** may include two or more displays **1400** according to embodiments.

[0157] The communication module **1300** is connected to a network **30** by wire or wirelessly to communicate with an external device or a server. The communication module **1300** may exchange data with a hospital server or another medical apparatus in a hospital, which is connected thereto via a PACS. Furthermore, the communication module **1300** may perform data communication according to the digital imaging and communications in medicine (DICOM) standard.

[0158] The communication module **1300** may transmit or receive data related to diagnosis of an object, e.g., an ultrasound image, ultrasound data, and Doppler data of the object, via the network **30** and may also transmit or receive medical images captured by another medical apparatus, e.g., a computed tomography (CT) apparatus, a magnetic resonance imaging (MRI) apparatus, or an X-ray apparatus. Furthermore, the communication module **1300** may receive information about a diagnosis history or medical treatment schedule of a patient from a server and utilizes the received information to diagnose the patient. Furthermore, the communication module **1300** may perform data communication not only with a server or a medical apparatus in a hospital, but also with a portable terminal of a medical doctor or patient.

[0159] The communication module **1300** is connected to the network **30** by wire or wirelessly to exchange data with a server **32**, a medical apparatus **34**, or a portable terminal **36**. The communication module **1300** may include one or more components for communication with external devices. For example, the communication module **1300** may include a local area communication module **1310**, a wired communication module **1320**, and a mobile communication module **1330**.

[0160] The local area communication module **1310** refers to a module for local area communication within a predetermined distance. Examples of local area communication techniques according to an embodiment may include, but are not limited to, wireless LAN, Wi-Fi, Bluetooth, ZigBee, Wi-Fi Direct (WFD), ultra wideband (UWB), infrared data association (IrDA), Bluetooth low energy (BLE), and near field communication (NFC).

[0161] The wired communication module **1320** refers to a module for communication using electric signals or optical signals. Examples of wired communication techniques according to an embodiment may include communication via a twisted pair cable, a coaxial cable, an optical fiber cable, and an Ethernet cable.

[0162] The mobile communication module **1330** transmits or receives wireless signals to or from at least one selected from a base station, an external terminal, and a server on a mobile communication network. The wireless signals may

be voice call signals, video call signals, or various types of data for transmission and reception of text/multimedia messages.

[0163] The memory **1500** stores various data processed by the ultrasound diagnosis apparatus **1000'**. For example, the memory **1500** may store medical data related to diagnosis of an object, such as ultrasound data and an ultrasound image that are input or output, and may also store algorithms or programs which are to be executed in the ultrasound diagnosis apparatus **1000'**.

[0164] The memory **1500** may be any of various storage media, e.g., a flash memory, a hard disk drive, EEPROM, etc. Furthermore, the ultrasound diagnosis apparatus **1000'** may utilize web storage or a cloud server that performs the storage function of the memory **1500** online.

[0165] The input device **1600** refers to a means via which a user inputs data for controlling the ultrasound diagnosis apparatus **1000'**. The input device **1600** may include hardware components, such as a keypad, a mouse, a touch pad, a touch screen, and a jog switch. However, embodiments are not limited thereto, and the input device **1600** may further include any of various other input units including an electrocardiogram (ECG) measuring module, a respiration measuring module, a voice recognition sensor, a gesture recognition sensor, a fingerprint recognition sensor, an iris recognition sensor, a depth sensor, a distance sensor, etc.

[0166] The controller **1700** may control all operations of the ultrasound diagnosis apparatus **1000'**. In other words, the controller **1700** may control operations among the probe **20**, the ultrasound transceiver **1100**, the image processor **1200**, the communication module **1300**, the display **1400**, the memory **1500**, and the input device **1600** shown in FIG. 16.

[0167] All or some of the probe **20**, the ultrasound transceiver **1100**, the image processor **1200**, the communication module **1300**, the display **1400**, the memory **1500**, the input device **1600**, and the controller **1700** may be implemented as software modules. Also, at least one of the ultrasound transmission/reception unit **1100**, the image processor **1200**, and the communication module **1300** may be included in the control unit **1700**; however, the inventive concept is not limited thereto.

[0168] FIG. 17 is a block diagram showing a configuration of a wireless probe **2000** according to an embodiment. As described above with reference to FIG. 16, the wireless probe **2000** may include a plurality of transducers, and, according to embodiments, may include some or all of the components of the ultrasound transceiver **2100** shown in FIG. 16.

[0169] The wireless probe **2000** according to the embodiment shown in FIG. 17 includes a transmitter **2100**, a transducer **2200**, and a receiver **2300**. Since descriptions thereof are given above with reference to FIG. 16, detailed descriptions thereof will be omitted here. In addition, according to embodiments, the wireless probe **2000** may selectively include a reception delaying unit **2330** and a summing unit **2340**.

[0170] The wireless probe **2000** may transmit ultrasound signals to the object **10**, receive echo signals from the object **10**, generate ultrasound data, and wirelessly transmit the ultrasound data to the ultrasound diagnosis apparatus **1000'** shown in FIG. 16.

[0171] The embodiments of the present disclosure may be written as computer programs and may be implemented in